

REMARKS / ARGUMENTS

Claims 1 – 43 remain in this application. New claims 44 – 58 have been added. Claims 1-43 have again been rejected under 35 USC 103(a) as being unpatentable over Blowers et al (6,298,474) ("Blowers"), in view of Kiraly et al (6,088,731) ("Kiraly").

The claims have been amended so as to make more clear what is essential to the invention. Accordingly, all references to "web browsers" have been removed from each of claims 1 – 43. New dependent claims 44 – 58 have been added to dependently claim some particular aspects of the user interface. The main inventive concepts as set forth in the independent claims does not depend on the particular type of user interface, as demonstrated by including new claims 44 – 58. Applicants assert that there are many other aspects of the invention that are clearly different from Blowers, Kiraly, or any combination thereof, as will be demonstrated below.

The Examiner states on page 7 of his Office Action that "the evidence of web browsers is brought out in Kiraly. The motivation [to combine Kiraly with Blowers] is proper, for effective communication for training and collecting information to a separate interface." However, Blowers is purely a **local** system; there is no mention of a networked architecture or communication between local and remote computing platforms, as now more clearly required by the amended claims. Applicant's invention includes **BOTH** local and remote computing

platforms for performing training and/or running of vision tools, also as more clearly required by all the amended claims.

Moreover, Blowers does not teach either performing training vision tools **remotely**, or running vision tools **remotely**. Instead, Blowers teaches a system for only **local** graphical control-flow programming for use in a machine vision system. The solely **local** system of Blowers enables an operator of the system to combine vision tools in a top-down, visual manner without writing code (col. 4, lines 52-59), but Blowers is silent on **remotely** performing this or any function **via a network**.

In col. 5, lines 7-9, Blowers states that "Software of the present invention is designed to run on distributed hardware platforms using Microsoft Windows NT V4.0 (or later) Operating System." This is **not** remote operation as required by claim 1, for example, and all of the other claims, as amended herein. Blowers is silent on a machine vision tool residing "on a **remote** computing platform accessible via the network", being selected using a "user interface running on a **local** computing platform accessible via the network", as required by claim 1, for example. Instead, Blowers is merely teaching standard known networking, such as for sharing printers, or disk storage, over a network, as managed by the Microsoft Windows NT Operating System.

Since Blowers does NOT teach any form of remote training or running of machine vision tools via a network, as required by all the amended claims, it cannot be not true that "This motivation is supported in Blowers, if at a minimum

to simply communicate it to the interface remotely from the direct part of the tool", as stated at the top of page 7 of the Examiner's Office Action.

Kiraly does not teach remote training and/or running of vision tools, or of any software, via a network. Instead, Kiraly teaches training of a **local** "intelligent assistant" (col. 2, lines 55 – 56); Kiraly does **NO remote** training. In particular, the intelligent assistant is locally trained "to respond to various text, voice, and mouse gesture commands" of the user of the local computer connected to the internet. (Col. 2, lines 55-60) The only remote activity performed via the network is "collecting site information" (col. 16, line 21) so as to collect "information of interest from those internet sites". (col. 2, lines 64-67). Thus, Kiraly does **NO remote** running of vision tools, or any other remote software via a network. Instead, Kiraly merely teaches the reading of an "intelligent assistant tag" 1110 on an HTML Page via the internet, as shown in Figs. 10 and 11 of Kiraly, for example. The "Plug-in DLL 1070" runs **locally** on the **local** computer system 112. Consequently, there is no teaching, suggestion, or motivation to combine Kiraly with Blowers to provide the invention as claimed more clearly in the amended claims, and in the new claims.

Regarding the Examiner's particular rejection of claim 1, Blowers fails to show essential aspects of amended claim 1, e.g., "selecting, via a user interface running on a local computing platform connected to the network, a machine vision tool on a remote computing platform accessible via the network". Blowers is entirely silent on "a remote computing platform", only teaching a local platform,

even though networks were common as of the filing date of Blowers, i.e., April 30, 1999. In fact, Blowers teaches away from running vision tools remotely, teaching merely conventional machine vision running on a local computer.

Further, Blowers fails to recognize either the utility or the role that a network can play in facilitating machine vision. By contrast, **Applicants' claimed invention recognizes the enormous utility of using a network to facilitate communication among various elements of a machine vision system, such as a local user interface, and a remote computing platform, for remotely training and running machine vision tools.** As a further example, Applicant's amended claim 1 requires "selecting, via the user interface running on the local computing platform connected to the network, machine vision tool training parameter information to be used for training the machine vision tool on the remote computing platform accessible via the network". Amended claim 1 also requires "sending, via the user interface running on the local computing platform connected to the network, the selected machine vision tool training parameter information to the machine vision tool on the remote computing platform". Further, amended claim 1 requires "commanding, via the user interface running on the local computing platform connected to the network, the remote computing platform to train the machine vision tool using the selected machine vision tool training parameter information." Blowers does not teach, suggest, or motivate **any** of these essential aspects of amended claim 1.

It is essential to fully understand that Blowers teaches away from **remotely** using a machine vision tool, instead teaching the usual essentially

local vision system architecture as shown in Fig. 2. Blowers Fig. 2 is silent on a network, instead showing a **local** internal system bus for interactions among a vision tool running on a host computer processor 28, an image digitizer/ frame grabber 22 with cameras 24, and an I/O unit 30. There is **no** discussion in Blowers of how **remote** training and/or running of a machine vision tool could be accomplished, or why one would want to accomplish such remote training and/or running of a machine vision tool.

The Examiner states on page 3 of the Office Action that "The machine tool itself is on a remote platform then." This is clearly not true of Blowers, as explained above. In Blowers, the machine [vision] tool is on a LOCAL computing platform. By contrast, Applicant claims that the machine vision tool is on a REMOTE computing platform, accessible via a network, as required by amended claim 1, for example, and all the other claims of Applicant herein.

Kiraly is silent on any mention of machine vision applications of a web browser, or how the internet can be applied to machine vision. Kiraly does not teach either remote training or remote running of a machine vision tool, or remote training or running of ANY software on a remote computing platform. Further, Blowers is silent on any mention of communicating via a network for remote training and/or running of machine vision tools.. There is no suggestion to combine these references in either reference to obtain the invention as claimed in the amended claims provided.

Further, combining Blowers with Kiraly would not result in Applicants' invention, as claimed in the amended claims herein. The elements of amended claim 1, for example, are missing from both Blowers and Kiraly.

Accordingly, the rejection of claim 1 under 35 USC 103(a) over Blowers and Kiraly is deemed to be overcome.

Regarding claim 2, since claim 2 depends from claim 1, herein deemed to be allowable, claim 2 is also deemed to be allowable for analogous reasons. In particular, Applicants' invention requires that selecting of the machine vision tool training parameter information be performed via a network. By contrast, Blowers is silent on remotely training a machine vision tool via a network. Thus, the rejection of claim 2 is deemed to be overcome.

Regarding claim 3, Blowers is silent on the requirements of amended claim 3. In particular, Blowers is silent on "an image communications device on a second remote computing platform accessible via the network". Blowers is also silent on sending "the image via the network to the machine vision tool on the remote computing platform". Further, claim 3 is dependent upon amended claim 1, which is deemed herein to be allowable. Consequently, claim 3 is deemed to be allowable.

Regarding claim 4, amended claim 4 requires "the image acquiring device being connected to an image communications device on a second remote

computing platform accessible via the network". Blowers is silent on anything being **accessibl via a n twork** on a **remote** computing platform, and further depends from allowable claim 1. Accordingly, the rejection of claim 4 is deemed to be overcome.

Regarding claim 5, as amended, Blowers lacks the architecture having a "remote computing platform", a "local computing platform", and an "image communications device", all connected to a network. Consequently, Blowers lacks all four elements of claim 5. Moreover, claim 5 depends on the allowable amended claim 1. Thus, claim 5 is also deemed to be allowable, and the rejection of claim 5 is deemed to be overcome.

Regarding claim 6, Blowers lacks the architecture depicted in Fig. 1 of Applicants' disclosure, and clearly set forth in amended claims 1 and 6. Moreover, claim 6 depends from allowable claims 1 and 3. Thus, the rejection of claim 6 is deemed to be overcome.

Regarding claim 7, Blowers lacks the basic architecture depicted in Fig. 1 of the disclosure, and so also lacks each element of amended claim 7, just as explained regarding claim 1. Kiraly et al fails to teach, suggest, or motivate the architecture shown in Fig. 1. Thus, combining these references does not result in Applicants' invention. Accordingly, the rejection of claim 7 under 35 USC 103(a) is deemed to be overcome.

Regarding claim 8, since this claim depends upon allowable claim 7, it too is deemed to be allowable.

Regarding claim 9, since Blowers lacks a remote computing platform that can be reached via a network, and since amended claim 9 depends from allowable amended claim 1, the rejection of claim 9 is deemed to be overcome.

Regarding claim 10, regardless of whether it would have been obvious to employ DXF files with AutoCAD data, Blowers is silent on the essential "remote computing platform reachable via the network, as required by amended claim 9. Since claim 10 depends from allowable claim 9, claim 10 is also deemed to be allowable.

Regarding claim 11, amended claim 11 requires that the machine vision tool reside on the remote computing platform. Since Blowers is silent on a remote computing platform, and since claim 11 depends from amended claim 1, deemed allowable, the rejection of claim 11 is deemed to be overcome.

Regarding claims 12 and 13, these claims require the architecture of Fig. 1, showing a remote and local computing platform in communication via a network. Further, these claims each depend from allowable amended claim 11. Thus, the rejection of claims 12 and 13 is deemed to be overcome.

Regarding claims 14-17, the rejection of these claims is overcome for analogous reasons set forth above.

Regarding claim 18, this claim requires the architecture of Fig. 1, showing a remote and local computing platform in communication via a network. Further, this claim depends from allowable amended claim 3. Thus, the rejection of claim 18 is deemed to be overcome.

Regarding claims 19-27, the rejection of these claims is overcome for analogous reasons set forth above.

Regarding claims 28-31, these claims require the architecture of Fig. 1, showing a remote and local computing platform in communication via a network. Further, these claims each depend from allowable amended claim 27. Thus, the rejection of claims 28-31 is deemed to be overcome.

Regarding claims 32-38, the rejection of these claims is overcome for analogous reasons set forth above.

Regarding claim 39, this claim depends from allowable amended claim 1. Consequently, this claim is also deemed to be allowable.

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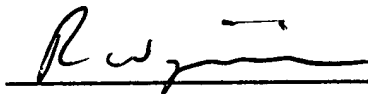
Regarding claims 40-43, these claims depend from amended allowable claims 1 and 3, each of which is supported by disclosure of the architecture of Fig. 1 of the specification. As asserted above, there is no suggestion to combine the cited references, and even if one did combine them, they do not teach the invention as set forth in amended claims 1 and 3. Thus, the rejection of claims 40-43 is deemed to be overcome.

New claim 44-58 are deemed to be allowable given that they each depend from an independent claim deemed to be allowable.

Accordingly, Applicants assert that the present application is in condition for allowance, and such action is respectfully requested. The Examiner is invited to phone the undersigned attorney to further the prosecution of the present application.

Respectfully Submitted,

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A handwritten signature in dark ink, appearing to read 'Russ Weinzimmer', is written over a horizontal line.

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